

Why India needs skills over degrees

With only 40-45% engineering students employable, India must shift from degree-focused to skill-based education through industry partnerships and practical learning, writes founder and CEO of TeamLease Edtech

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In India, nearly 1.5 million students graduate as engineers annually and yet the employability in core technical roles remains a serious concern. According to AICTE and NASSCOM, only 40-45% of engineering graduates are considered employable in their field of study. The challenge is even more acute in Tier 2 and Tier 3 institutions, as well as in underserved regions where access to updated curriculum and infrastructure is limited. A 2024 analysis by TeamLease EdTech highlights high industry demand in areas like data science, AI/ML, cybersecurity, renewable energy, and embedded systems. But this demand isn't translating into jobs because of a persistent skills gap between what the degree imparts and what the job requires.

Degrees to skills: Market-driven shift

The hiring landscape is rapidly evolving. Today, employers value project readiness, digital fluency, and the ability to apply knowledge in real-world contexts far more than academic grades. The World Economic Forum estimates that by 2027, 44% of core job skills will change, underlining the importance of continuous skilling throughout higher education. For students, this means that employability can no longer hinge on a degree

alone. A paper credential without the skills to match is simply not enough. Applied learning, problem-solving, and exposure to workplace tools and methodologies are now critical markers of readiness.

New-age programmes

Premier academic institutions are stepping up to bridge the employability divide. TeamLease EdTech has partnered with IIT Delhi, IIT Patna, IIT Bhilai, IIM Udaipur and other top-tier institutes to develop online and executive education programmes that respond directly to industry needs. Programmes include AI Application in Healthcare with IIT Delhi, Cloud Computing and Big Data with IIT Patna, and Digital Marketing and NeuroMarketing with IIT Jammu.

For senior professionals, IIM Udaipur offers a targeted Senior Management Programme. Work-integrated degrees, launched with various institutional partners, combine academic instruction with practical work exposure. These programmes are flexible, blended, and experiential, designed to allow learners to upgrade their skills without leaving the workforce. The result – a more industry-aligned graduate who is better equipped to contribute from day one.

Employability in degree courses

Across the country, more universities are adopting a new approach to embed employability into degree programmes. Institutions like Andhra University, Chandigarh University, Mizoram University, and Bangalore University are integrating skilling modules, apprenticeships, and placement-linked certifications into the traditional degree structure. One particularly promising trend is the rise of degree apprenticeships, a model that combines classroom education with paid, hands-on job experience. This model, endorsed by UGC, MSDE, and AICTE, is rapidly gaining ground as it offers dual benefits – formal qualifications and work exposure.

In parallel, universities are also expanding their footprint beyond engineering. Programmes in

digital marketing, business analytics, financial risk management, healthtech, and agritech are equipping students from non-technical backgrounds with in-demand, tech-enabled skills. Universities like Jain University and Bangalore University are now offering online programmes in management and other business roles, opening up employability opportunities across disciplines.

Education-employment divide

As the National Education Policy (NEP) 2020 reshapes academic frameworks and the UGC pushes for Online and ODL-friendly ecosystems, online learning is no longer viewed as an alternative, it is becoming mainstream. TeamLease EdTech's Digiversity platform enables students to access flexible, affordable, and employment-linked education from top universities, making high-quality learning more inclusive and scalable. But technology alone isn't the answer. Real progress lies in collaboration. Employers are now co-creating curriculum, offering live projects, mentorships, and internships to help students gain real-world experience while still in college. Programmes built with both academic and industry inputs are now creating job-ready professionals in domains like Data Engineering, IoT, Blockchain, and Green Tech.

To build a stronger pipeline of employable graduates, several key actions must follow. Curriculum modernisation must align with the National Credit Framework (NCrF). Industry internships and apprenticeships should be made mandatory for final-year students. Platforms like Digiversity emerge as a common ground where academia and employers collaborate.

Finally, AI-driven career services and job-matching tools must be embedded into university systems to help students navigate their options more effectively. For India to fully realise the demographic dividend, we must move beyond the degree and prioritize skill, exposure, and adaptability as the true markers of employability. 

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